

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A howling detector, comprising:

a frequency analyzing section for dividing a time signal into a plurality of frequency band signals;

a level calculating section for calculating ~~a level~~ of each of the plurality of frequency band signals output from the frequency analyzing section over a time period defining a time progression;

a howling detecting section for analyzing ~~value of~~ the level calculated by the level calculating section and outputting a howling detection signal indicating deciding whether howling ~~occurs is detected~~ or not;

a periodic signal detecting section for ~~analyzing time~~ analyzing the time progression of the level calculated by the level calculating section and ~~deciding~~ outputting a periodic detection signal indicating whether or not the time progression of the level calculated by the level calculating section ~~has~~ section have periodicity; and

a howling deciding section for ~~finally receiving the howling detection signal and the periodic detection signal, deciding whether howling occurs or not based on decision results of the howling detecting section and the periodic signal detecting section;~~

wherein the howling deciding section ~~finally~~ decides that howling occurs when the howling detection section ~~decides howling occurrence~~ signal indicates howling is detected and further the periodic detection signal detecting section ~~decides~~ indicates that the time progression of the level calculated by the level calculating section does not have periodicity.

2. (Previously Presented) The howling detector according to claim 1, wherein the howling detecting section includes:

an average level calculating section for calculating a mean value of levels of all frequency bands;

a level ratio calculating section for calculating a level ratio which is a magnification difference between the level calculated by the level calculating section and an average level calculated by the average level calculating section;

a level ratio analyzing section for analyzing the level ratio calculated by the level ratio calculating section; and

a level ratio deciding section for deciding whether howling occurs or not based on an analysis result of the level ratio analyzing section.

3. (Previously Presented) The howling detector according to claim 1, wherein the periodic signal detecting section includes:

an envelope calculating section for calculating an envelope of the time progression of the level calculated by the level calculating section;

a signal condition deciding section for deciding which one of predetermined signal conditions corresponds to the envelope calculated by the envelope calculating section; and

a periodicity deciding section for deciding, based on a decision result of the signal deciding section, whether time progression of the envelope has periodicity or not.

4. (Previously Presented) The howling detector according to claim 3, wherein the signal condition deciding section decides which at least one or more signal conditions of a rising edge of a signal, a signal interval, and a non-signal interval correspond to the envelope calculated by the envelope calculating section.

5. (Previously Presented) The howling detector according to claim 3, wherein the periodicity deciding section compares at least one or more of signal

interval lengths and non-signal interval lengths between a latest time period and a past time period in the envelope calculated by the envelope calculating section.

6. (Original) The howling detector according to claim 3, wherein the level calculating section, the howling detecting section, the periodic signal detecting section, and the howling deciding section perform processing only on some frequency bands.

7. (Original) An acoustic device comprising the howling detector according to claim 1 and a howling suppressor.

8. (Currently Amended) A howling detection method, comprising:

a frequency analysis step of a plurality of filters dividing a time signal into a plurality of frequency band signals;

a level calculation step of calculating level-a level of each of the plurality of frequency band signals output from the frequency analysis step;

a howling detection step of analyzing ~~value of~~ the level calculated in the level calculation step and ~~deciding-outputting a howling detection signal indicating whether howling occurs-is detected~~ or not;

a periodic signal detection step of analyzing ~~time-the time~~ progression of the level calculated by the level calculating section and ~~deciding-outputting a periodic detection signal indicating whether~~ or not time progression of the level calculated in the level calculation step has periodicity, and;

a howling decision step of receiving the howling detection signal and the periodic detection signal, finally deciding whether howling occurs or not based on decision results of the howling detection step and the periodic signal detection step

wherein in the howling deciding ~~decision~~ step, ~~howling occurrence-it is~~ finally decided in cases where that howling occurrence occurs when the howling detection signal indicates howling is detected is decided in the howling detecting step and further, the periodic detection signal indicates it is decided that the time progression

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of the level calculated by the level calculating section does not have periodicity in the
periodic signal detecting step.